

Fig. 1



GAAA -4

AGACGCGCAGGCCGGCCCTCTCCCGACGGGGAGTAGCGCTGCAGCCGGACGCAGGGTGCAGTTA  10 20 30 40 50 60																	
GAA!	rcca'	raga	CGGT(		M ATG	G GGA . 90	S AGC	K AAA	G GGA	G GGG 100	F TTC	I ATT	L TTG	L CTC	W TGG	L CTC 120	-14
L CTG	S TCC	I ATC	L CTG	A GCT	V GTT	L CTC	C TGC	H CAC	L TTA		H CAC	S AGC	L CTG	Q CAG	C TGC	Y TAT 170	4
N AAC	C TGT	I ATC		P CCA		G GGT 190	S AGC	C TGC	T ACT 200	T ACG	A GCC	M ATG	Ψ Ν ΤΑΑ	C TGT	S TCA	H CAT 220	21
N AAT	Q CAG	D GAT 230	A GCC	C TGT	I ATC 240		V GTT	E GAA	A GCC 250	V GTG	P CCA	P CCC 260	K AAA	T ACT	Y TAC 270		38
Q CAG	C TGT	W TGG	R AGG	F TTC	D GAT 290	E GAA	C TGC	N AAT 300		D GAT	F TTC	I ATT 310	S TCG	R AGA	320	L CTA	55
	E GAG 330		K AAG		ĸ	Y TAC	n AAC	C TGC 350	C TGC	R CGG	K AAG	D GAC	L CTG	C TGT	Ψ N AAC	K AAG	72
↓ S AGT	D GAT 380	A GCC	T ACG	I ATT 390		S TCA	G GGG 400	K AAA	T ACC	A GCT	L CTG	L CTG	V GTG	I ATC 420	L CTG	L CTG	89
L CTG		A GCA	T ACC	W TGG 440	H CAC	F TTT	C TGT 450	L CTC	* TAA								98
CTGTACACCAGGAGAGTTTCTCCTCAACTTCCTCTGTCTCTGTTCCTATTTCCCATGCTGCGGTGTT																	
CCAAAGGCTGTGTATGCTCCAGCTTCTTCCTGTTGGGAAGGACTAAACCTAGCTTGAGCACTTTGGATT 530 540 550 560 570 580 590																	
AGAGAGAGAAACTTTGAGCGACTTTGAAGACCAGGCCTGTTGGCAGAGAAGACCTGTCAGAGGGGAAAC																	
GTTTTAAGAGTGAAGCACAGGTGATTTGAGCGAGGCCTATGCGTCTTCCTCTGCTCTTGGCAGGACCAG																	
CTTTGCGGTAACCATTCGATAGATTCCACAATCCTT 740 750 760																	

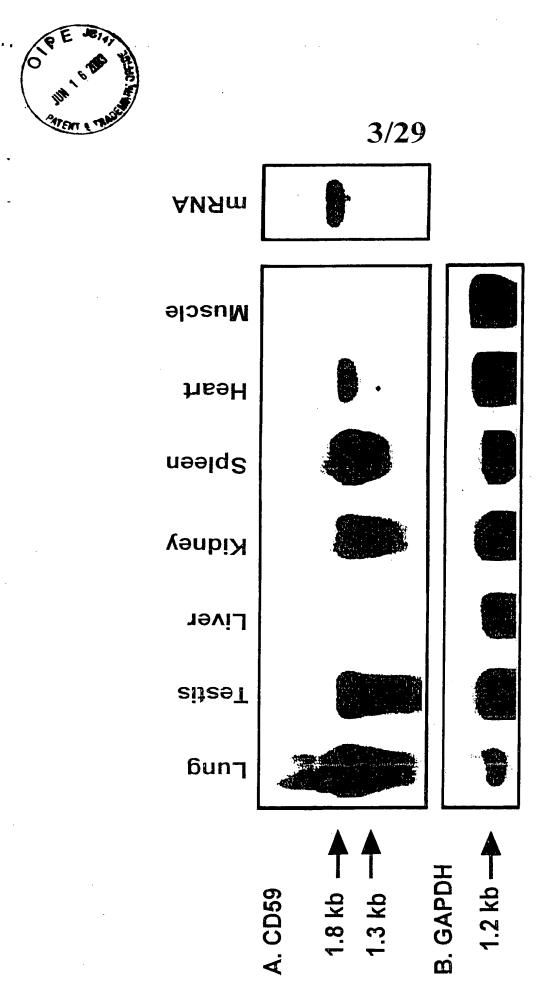


Fig. 3

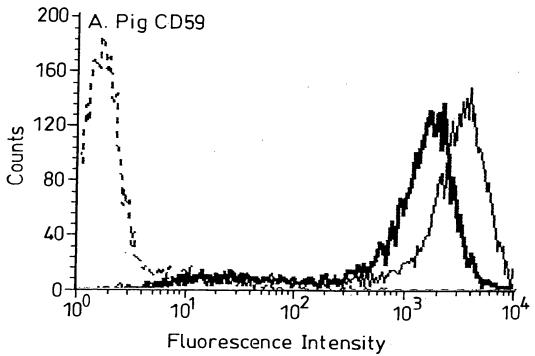


			4	#/ Z	9			II.	
0	PIG: MGSKGGFILLWLLSILAVLCHLGHSLQCYNCINP-AGSCTTAMNCSHNQDACIFVEAVPPKTYYQ 		MUR: MRAQRGLILLLLLLAVFCSTAVSLTCYHCFQPVVSSCNMNSTCSPDQDSCLYAVAGMQVYQ-R	06 -	KKLKYNCCRKDLCNKSDATIS-SGKTALL-VILLLVATWHFCL.	CWKFEHCNFNDVTTRLRENELTYYCCKKDLCNFNEQLENGGTSLSEKTVLLLVTPFLAAAWSLHP.	CWRFSDCNAKFILSRLEIANVQYRCCQADLCNKSFEDKPNNGAISLLGKTALL-VTSVLAAILKPCF.	CWKQSDCHGEIIMDQLEETKLKFRCCQFNLCNKSDGS-LGKTPLLGTSVLVAIL-NLCFLSHL,	
30	QDACIFVEZ          FDACLITKZ	  NLDACLVAV; 	QDSCLYAV	08	SGKTALL-VI	TSLSEKTVLLLVT)	GKTALL-VT	KTPLLGTS	GRTVLL-VAP
20	TAMNCSHN		MNSTCSPD	ω -	ATIS-SG	GGTSLSE	NGÁISLLG	GS-LG	  X
10	INP-AGSCT     - PNP-TADCK	LDP-VSSCK	FQPVVSSCN	0	NKSD	NFNEQLEN-	OLCNKS FEDKPN	NKSD	NGPEDDGTA
ᠳ -	LCHLGHSLQCYNCINP-AGSCTTAMNCSHNQDACI	 TGVSLRCYNCLDP-V	VSLTCYHC	7	KLKYNCCRKDLCNK	YYCCKKDLCNFNE	RCCQADLC	RCCOFNLC	
-10	LAVLCHLG          /LAVFCHSG		LLAVECSTA	09	NLAEKKLKY	RLRENELTY	RLEIANVQY	OLEETKLKE	
	FILLWLLSILAV            SVLFGLLVLAV		LILLLL	50	CWRFDECNFDFISRNLAE	CNENDVIT	CNAKFILS	CHGELIMD	  WRYEDCNFEFISN
-20			MRAQRG	40					
	PIG: HUM:	RAT:	MUR:		PIG:	HOM:	RAT:	MUR:	RAB:

Fig. 4







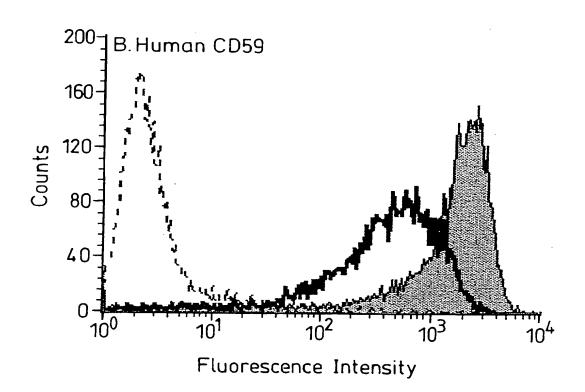


Fig. 5

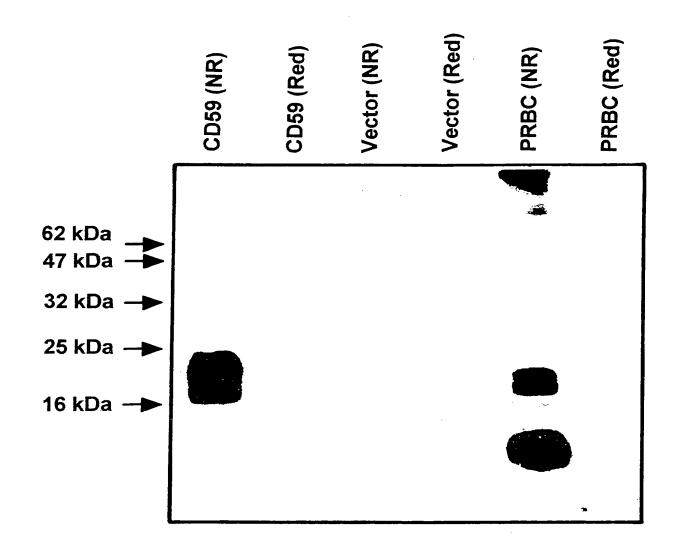
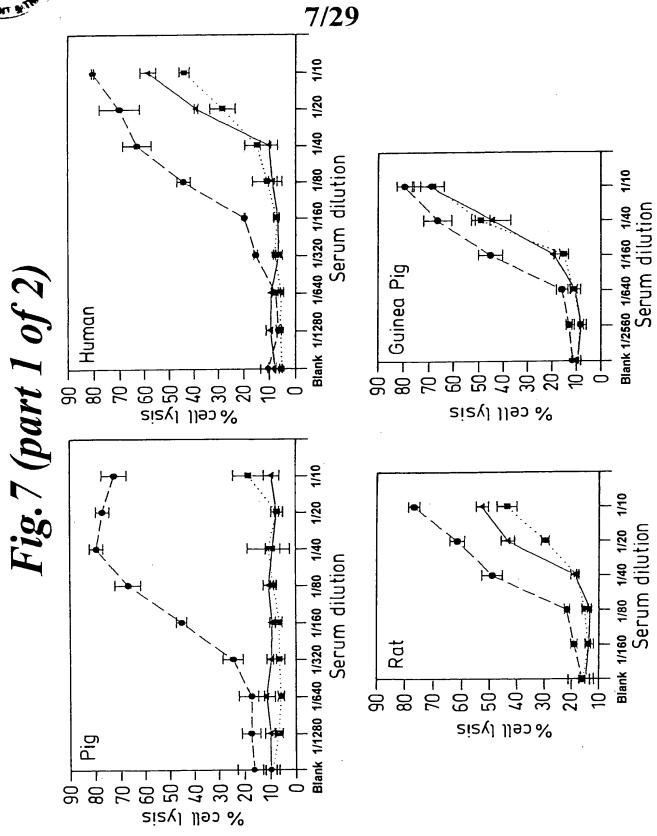


Fig. 6







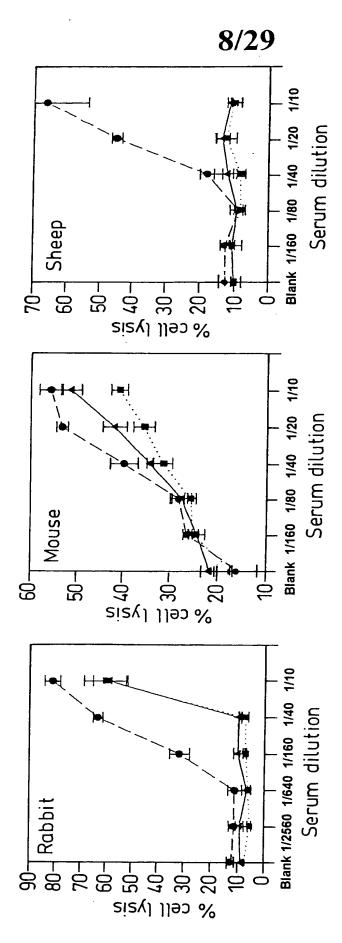
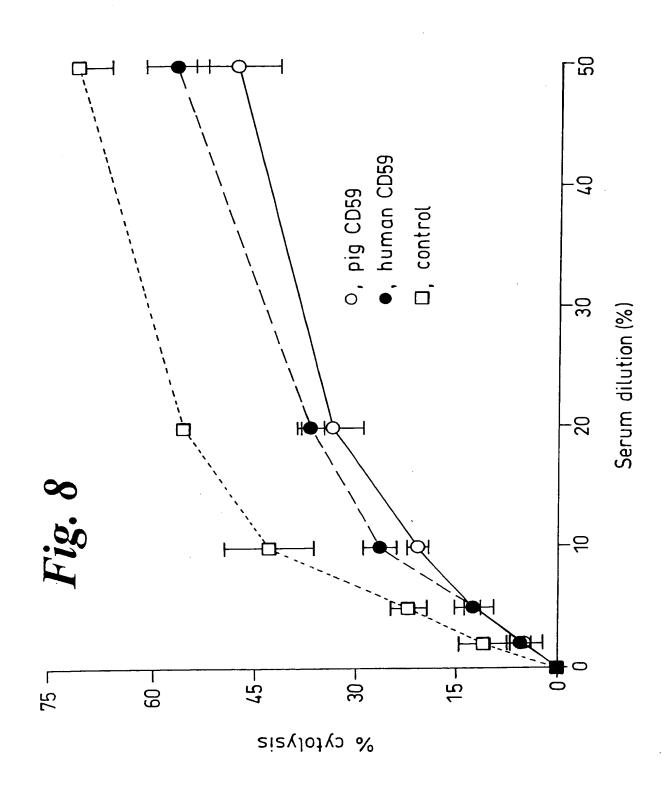


Fig. 7 (part 2 of 2)





# Time course Cofactor activity: pig MCP vs Hu sMCP

Time

Fig. 9

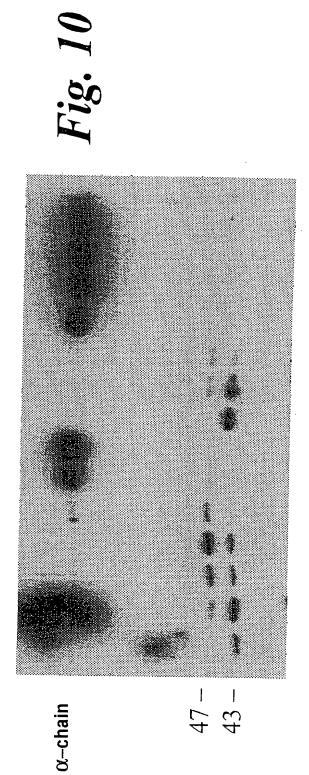
0 5' 15' 1h 2h 6h 16h 0 5' 15' 1h 2h

α−chain

-Pig MCP ———Hu sMCP

Dose/response Cofactor activity: pig MCP vs Hu sMCP

ng MCP 300 100 30 10 3 1 - 300 100 30 10 3



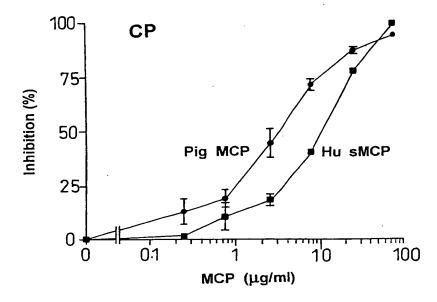
Pig MCP — Hu sMCP —

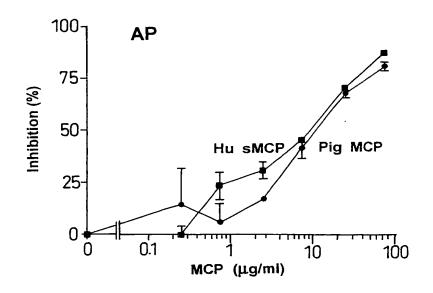


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Fig. 11

# Inhibition of CP and AP of human serum by human sMCP and pig MCP







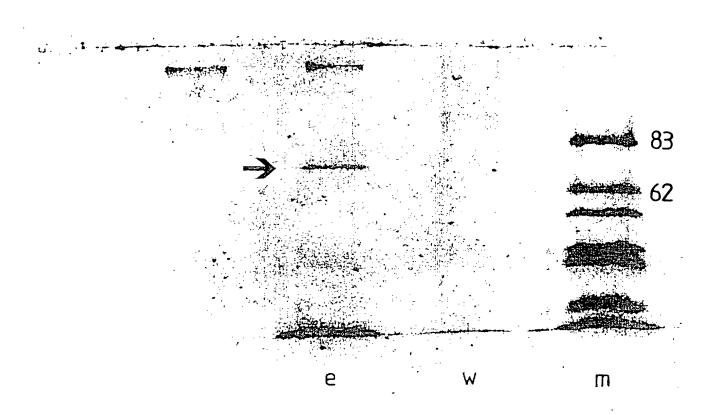
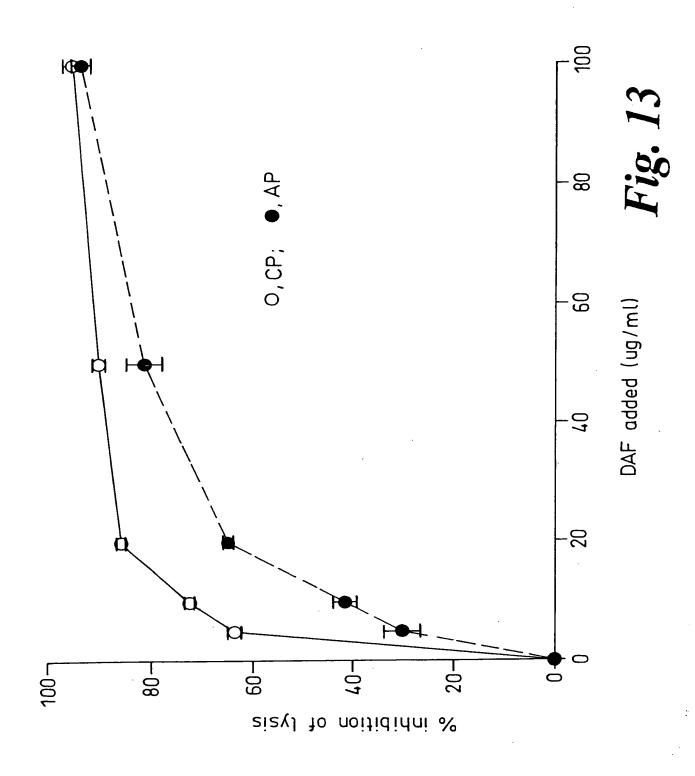


Fig. 12







### pDAF-7 cDNA sequence:

CCACCGCGGTGGCGGCNCGCTCTAGAACTAGTGGATCCCCCGGGCTGCAG GAATTCGGCACGAGATTTCGTCTTAATCGCGGAGGTCGCAGAGTCCGGGA GCCGCTCGGGGTCCCCGTTCCCGCGCGCCATGAGTCCCCTGCCGCGGAGC GCCCCGCGGTGAGGCGCCTAATGGGCGGACAGACGCCGCCGCCGCTGCT GCTGCTGCTGCTGCTGTGTATCCCGGCTGCGCAGGGTGACTGCAGCC TTCCACCGATGTACCTAATGCCCAACCAGATTTGCGAGGTCTTGCAAGT TTTCCTGAACAACCACAATAACATACAAATGTAACAAAGGCTTTGTCAA AGTTCCTGGCATGGCAGACTCAGTGCTCTGTCTTAATGATAAATGGTCAG AAGTTGCAGAATTTTGTAATCGTAGCTGTGATGTTCCAACCAGGCTACAT TTTGCATCTCTTAAAAAGTCTTACAGCAAACAGAATTATTTCCCAGAGGG TTTCACCGTGGAATATGAGTGCCGTAAGGGCTATAAAAGGGATCTTACTC TATCAGAAAAACTAACTTGCCTTCAGAATTTTACGTGGTCCAAACCTGAT GAATTTTGCAAAAAAAAACAATGTCCGACTCCTGGAGAACTAAAAAATGG CATGTAACGCAGGGTACAGACTAGTTGGTGCAACTTCTAGTTACTGtTTT GCCATAGCAAATGATGTTGAGTGGAGTGATCCATTGCCAGATTGCCAAGA AATTTCTCCAACTGTCAAAGCCATACCAGCTGTTGAGAAACCCATCACAG TAAATTTTCCAGCAACAAAGTATCCAGCTATTCCCAGGGCCACAACGAGT TTTCATTCAAGTACATCTAAAAATCGAGGAAACCCTTCTTCAGGCATGAG AATCATGTCGTCTGGTACCATGCTACTTATTGCAGGAGGTGTTGCTGTTA TTATAATAATTGTTGCCCTAATTCTAGCCAAAGGTTTCTGGCACTATGGA AAATCAGGCTCTTACCACACTCATGAGAACAACAAAGCCGTTAATGTTGC ATTTTATAATTTACCTGCGACTGGCGATGCCGCAGATGTAAGACCTGGTA ATTAACAAAAGGACGTGCATGTGTAACACTGACAGTTTTGCTTATGGTGC TAGTAACCATTGGCTAGCTGACTTAGCCAAAGAAGAGTTAAGAAGAAGT GCACACAGTACACAGAATATTTTCAGTTTCTTAAAACTTTCAGGTGGGA GTGGACATAGTTTGTGGTAGTGNTCTTCGNTTTGCATGGTTTCATTGGCT CTAAGGNACATAGGAATGCACAGAACCNAAGAGAAACAAATCTATCCTGA AANTACATCCTCAACACTTCTAANACTCTTGGAAATNGAACAAGNTCATA AGATTGGGAGCAATTACTTTCCCAAAAGGGTGAGAAAATGGAGAAATTT GGTCATGGGTAGNAATTTTNGAAAAANGAAACCCNAAAGGGGANTTTTCC AAAAACCCNNNGGGGGGGCCCGGGNCCCATTTTCCCT

### pDAF-14 cDNA sequence:

CACGAGCCGCCGCTGCTGCTGCTGCTGCTGCTGTGTGTATCCCGGC TGCGCAGGGTGACTGCAGCCTTCCACCCGATGTACCTAATGCCCAACCAG ATTTGCGAGGTCTTGCAAGTTTTCCTGAACAAACCACAATAACATACAAA TGTAACAAAGGCTTTGTCAAAGTTCCTGGCATGGCAGACTCAGTGCTCTG TCTTAATGATAAATGGTCAGAAGTTGCAGAATTTTGTAATCGTAGCTGTG ATGTTCCAACCAGGCTACATTTTGCATCTCTTAAAAAGTCTTACAGCAAA CAGAATTATTTCCCAGAGGGTTTCACCGTGGAATATGAGTGCCGTAAGGG CTATAAAAGGGATCTTACTCTATCAGAAAACTAACTTGCCTTCAGAATT CCTGGAGAACTAAAAAATGGTCATGTCAATATAACAACTGACTTGTTATT TGGCGCATCCATCTTTTCTCATGTAACGCAGGGTACAGACTAGTTGGTG CCATTGCCAGAaTGCCAAGAAATTTCTCCAACTGTCAAAGCCaTACCAGC TGTTGAGAAACCCATCACAGTAAATTTTCCAGGTACCAAAGCCCTATCAT CTCCTCAGAAACCCTCCACAGCAAATACTCTAGCTACAGAGTTACTACCA ACTCCTCAGGAACCCACCACAGTAAATGTTCCAGATAGTAAAGCCATATC ATCTCCTCAGAAACCCTCCACAGTAAATACTCCAGCTACAGACTTACTAC CAACTCCTCAGGAACCCACCACAGTAAAtGTTCCAGATAGTAAAGCCATA TCATCTTCTCAGAAACCCTCCACAGTAAATACTCCAGCTCAGACTTACTA CCAACTCCTCAGGAACCCACCACAGTGA



### pDAF-7, predicted protein sequence:

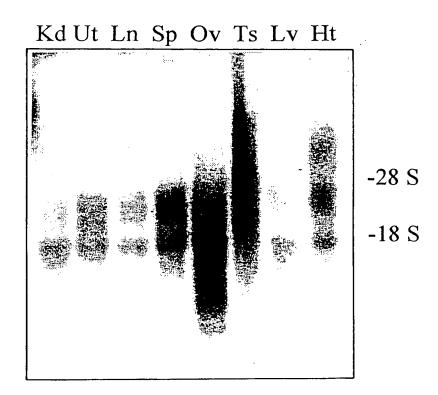
MGGOTPPPLLLLLLLCIPAAQGDCSLPPDVPNAQPDLRGLASFPEQTTI TYKCNKGFVKVPGMADSVLCLNDKWSEVAEFCNRSCDVPTRLHFASLKKS YSKONYFPEGFTVEYECRKGYKROLTLSEKLTCLQNFTWSKPDEFCKKKQ CPTPGELKNGHVNITTDLLFGASIFFSCNAGYRLVGATSSYCFAIANDVE WSDPLPDCQEISPTVKAIPAVEKPITVNFPATKYPAIPRATTSFHSSTSK NRGNPSSGMRIMSSGTMLLIAGGVAVIIIIVALILAKGFWHYGKSGSYHT HENNKAVNVAFYNLPATGDAADVRPGN.

### pDAF-14, predicted protein sequence:

HEPPPLLLLLLLCIPAAQGDCSLPPDVPNAQPDLRGLASFPEQTTI
TYKCNKGFVKVPGMADSVLCLNDKWSEVAEFCNRSCDVPTRLHFASLKKS
YSKQNYFPEGFTVEYECRKGYKRDLTLSEKLTCLQNFTWSKPDEFCKKKQ
CPTPGELKNGHVNITTDLLFGASIFFSCNAGYRLVGATSSYCFAIANDVE
WSDPLPECQEISPTVKAIPAVEKPITVNFPGTKALSSPQKPSTANTLATE
LLPTPQEPTTVNVPDSKAISSPQKPSTVNTPATDLLPTPQEPTTVNVPDS
KAISSSQKPSTVNTPAQTYYQLLRNPPQ

Alignment with human DAF (conserved residues marked as *):  1 10 20 30 40 50  PSVPAALPLLGELPRLLLLVLCLPAVWGDCGLPPDVPNAQPALEGRTS	HuDAF
MGGQTPPPLLLLLLLCIPAAQGDCSLPPDVPNAQPDLRGLAS	pDAF-7
51 60 70 80 90 100 FPEDTVITYKCEESFVKIPGEKDSVTCLKGMQWSDIEEFCNRSCEVPTRL	HuDAF
FPEQTTITYKCNKGFVKVPGMADSVLCLND-KWSEVAEFCNRSCDVPTRL	pDAF-7
101 110 120 130 140 150 NSASLKQPYITQNYFPVGTVVEYECRPGYRREPSLSPKLTCLQNLKWSTA	HuDAF
HFASLKKSYSKQNYFPEGFTVEYECRKGYKRDLTLSEKLTCLQNFTWSKP	pDAF-7
151 160 170 180 190 200 VEFCKKKSCPNPGEIRNGQIDVPGGILFGATISFSCNTGYKLFGSTSSFC	HuDAF
DEFCKKKOCPTPGELKNGHVNITTDLLFGASIFFSCNAGYRLVGATSSYC	pDAF-7
201 210 220 230 240 250 LISGSSVQWSDPLPECREIYCPAPPQIDNGIIQGERDHYGYRQSVTYACN	HuDAF
FAIANDVEWSDPLPDCQEI  Tend SCR3	pDAF-7
251 KGFTMIGEHSIYCTVNNDEGEWSGPPPECRGKSLTSKVPPTVQKPTTVNV	HuDAF
SPTVKAIPAVEKPITVNF Tend SCR4	pDAF-7
301 PTTEVSPTSQKTTTKTTTPNAQATRSTPVSRTTKHFHETTPNKGSGTTSG	HuDAF
PATKYPAIPRATTSFHSSTSKNRGNPSSGMRIMSSGTMLLIAGGVAVIII  1 fend STP-A	pDAF-7
351 TTRLLSGHTCFTLTGLLGTLYTMGLLT	HuDAF
IVALILAKGFWHYGKSGSYHTHENNKAVNVAFYNLPATGDAADVRPGN.	pDAF-7





Northern analysis of porcine DAF

Fig. 16



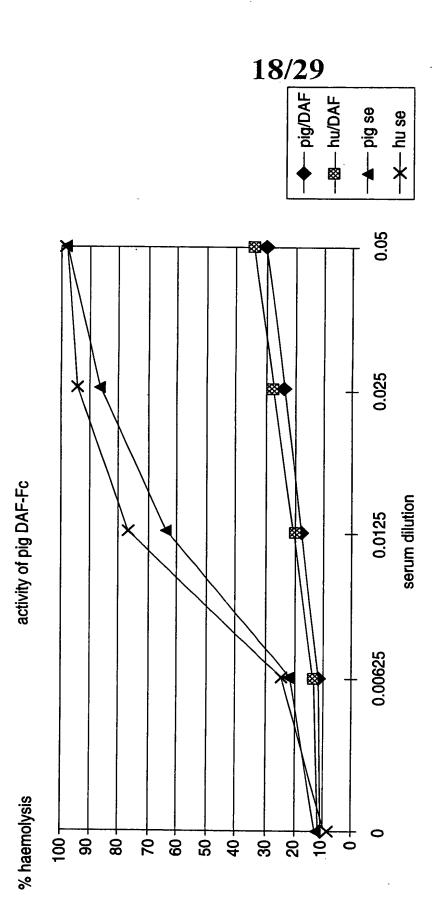


Fig. 17a



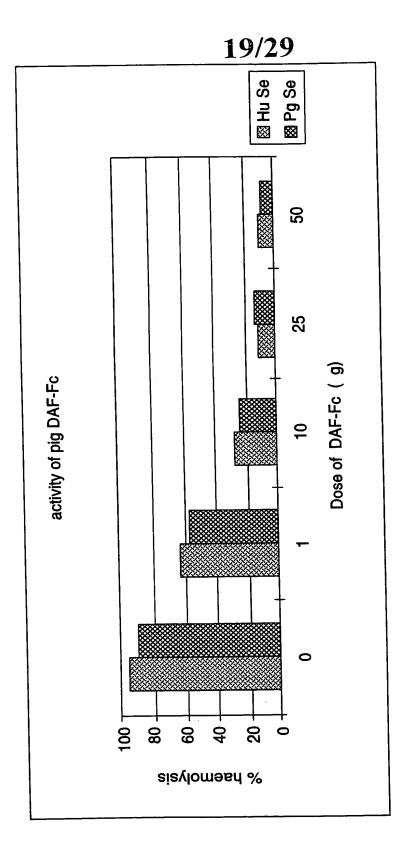
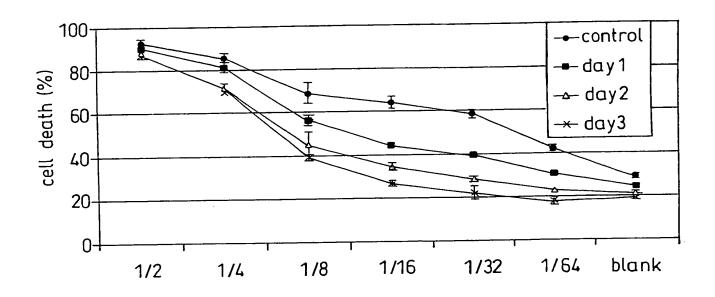


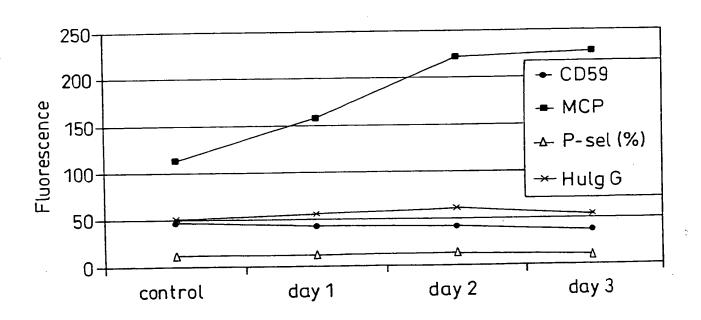
Fig. 17b



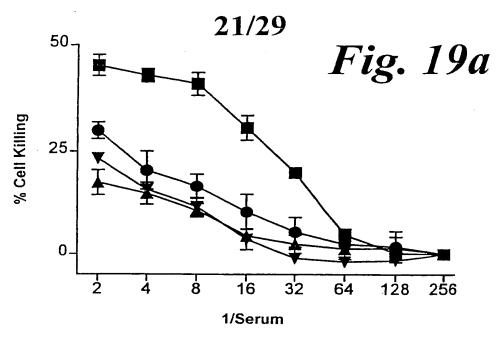
20/29 Effect of PMA on expression of  $\it Fig.~18$  CD59 and MCP and C-

susceptibility of PAEC









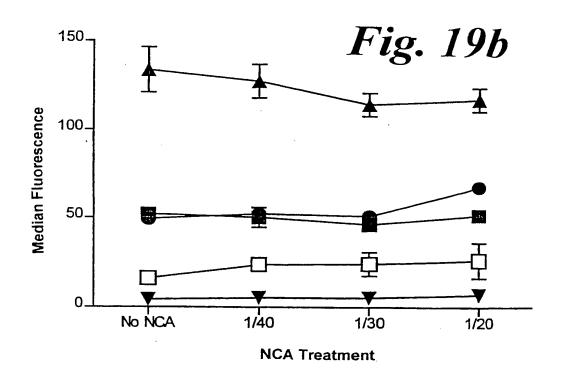
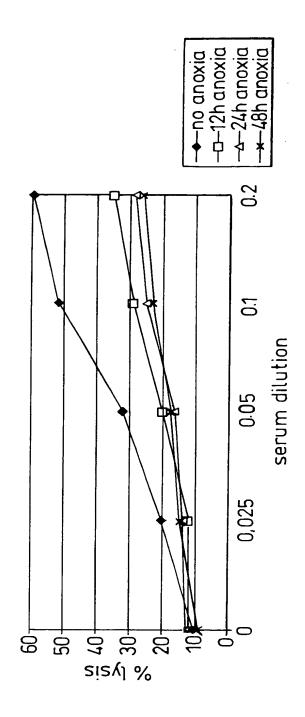




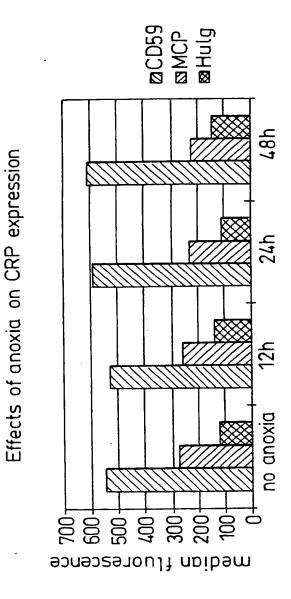
Fig.~20a Effects of anoxia

effects of anoxia



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 $Fig.\ 20b$  Effects of anoxia





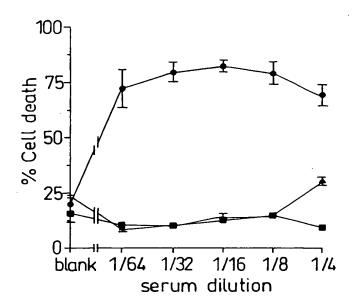


Fig. 21a

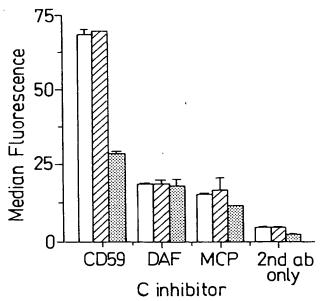


Fig. 21b



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Expression of pig CD59 on pig aortic endothelial cells (PAEC) at different passages.



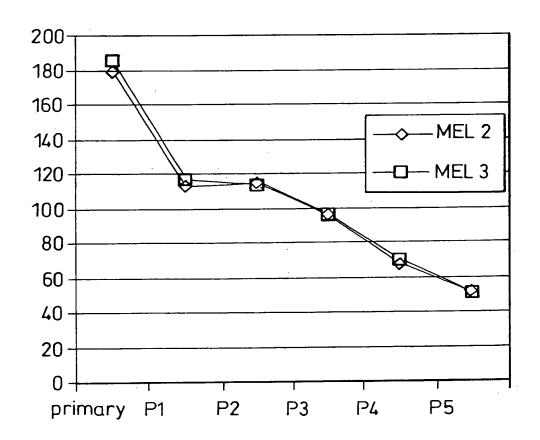


Fig. 22

Expression of pig MCP on pig aortic endothelial cells (PAEC) at different passages.

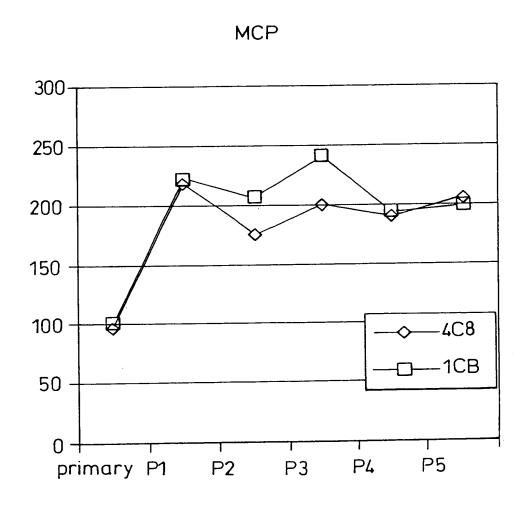
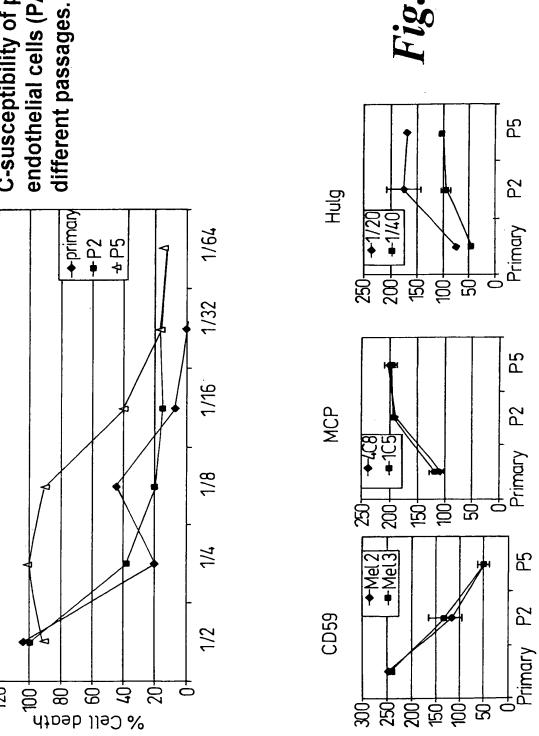


Fig. 23



C-susceptibility of pig aortic endothelial cells (PAEC) at





# Effect of blocking CD59 and MCP of C-susceptibility of PAEC.

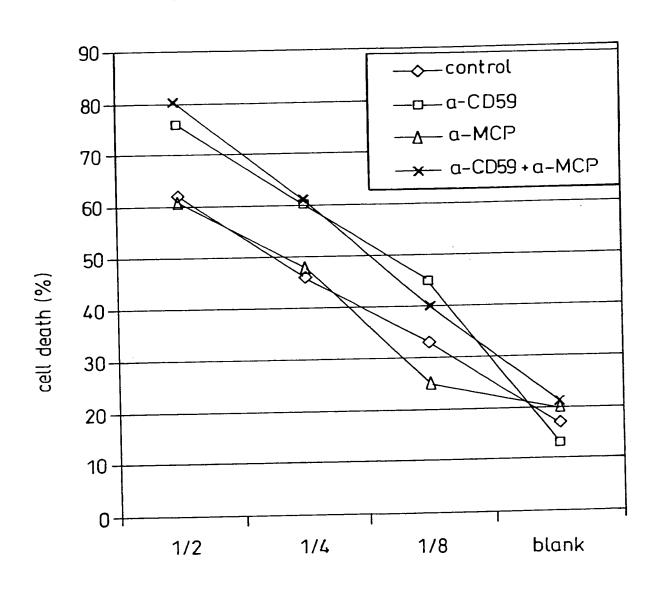
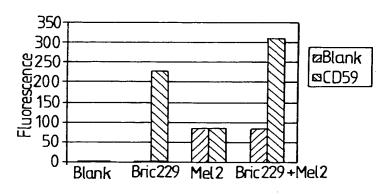


Fig. 25



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Incorporation of Human CD59 into PAEC and effect of blocking of human and pig CD59 on C-susceptibility.



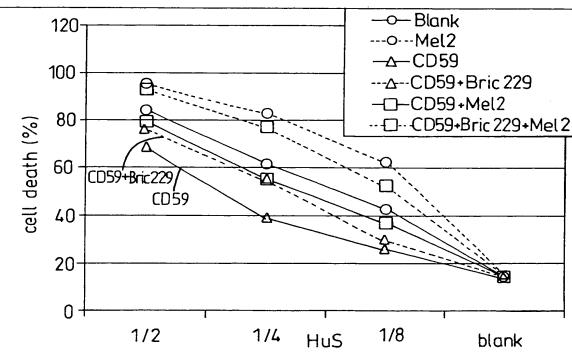


Fig. 26